DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Casey, William
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-027837
Date Inspected: 22-Jun-2012

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1930
Location: Job site

CWI Name:	As Noted Below			**CWI Present:**	☑ Yes	☐ No	
Inspected CWI report:	☐ Yes	☐ No	☑ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG/Tower

Summary of Items Observed:

Quality Assurance Inspector (QA) Rodney Patterson was at the American Bridge/Fluor (ABF) job site at Yerba Buena Island in California between the times noted above in order to monitor Quality Control functions and the in process work being performed by ABF personnel. The following items were observed:

The QA inspector observed at random intervals, ABF/JV qualified welder Richard Garcia # 5892 performing fit up of the wing plate assemblies for the longitudinal stiffener LS2 between panel point 124.5 and 125. The ABF Quality Control (QC) inspector Salvador Merino was observed performing visual confirmation of the fit up wing plates to ensure compliance.

The ABF/JV qualified welder Richard Garcia #5892 was observed later in the shift performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification ABF-WPS-D1.5-1162-4. The welding observed was for the HPS-485 longitudinal stiffener wing plate partial joint penetration (PJP) weld connections located between panel points 124.5 and 125 at LS2. The weld surface and surrounding area was brought to temperature by the use of induction heaters and the preheat temperature was confirmed ABF personnel prior to welding. The Quality Control (QC) inspector Salvador Merino was observed monitoring the welding parameters at the start of welding. The root pass of the weld was observed to be completed prior to the end of the QA inspectors shift and requires magnetic particle testing prior to the deposit of additional layers.

The QA inspector noted and periodically observed ABF/JV welder Eddie Brown#9331 performing Shielded Metal Arc Welding (SMAW) in the 4G position utilizing the Caltrans approved Welding Procedure Specification

ABF-WPS-D1.5-1004. The welding observed was for the repair of the deck panel drop-in splice weld as previously rejected by Ultrasonic Testing (UT). The repair surface and surrounding area was brought to temperature by the use of induction heaters placed on the topside of the deck. The preheat temperature was confirmed ABF personnel prior to welding. The weld is located between panel points 122~122.5 and is designated as 13E-122.2. The weld repairs observed were completed at the following locations in the above mentioned weld prior to the end of the QA inspectors shift.

Y=820mm, Depth 6mm, Length=60mm
Y=700mm, Depth 10mm, Length=65mm
Y=280mm, Depth 5mm, Length=30mm

The QA inspector was present for a pre-plan meeting in order to discuss the verification of the ABF QC reports for Ultrasonic Testing of the Tower Shear Plate connections with Caltrans consultant Level III Robert Mertz. The QA was given reports to verify for weld E-045 #24 “F” that has been previously tested and accepted by QC Ultrasonic technicians in accordance with AWS D1.5-2002,table 6.4 and supplemental contract document SE-UT-D1. 5-CT-108-ESW. The QA was informed that transverse indications were previously observed in repair excavations on these welds and that scanning pattern “E” will need to be utilized in order to detect these indications due to the weld reinforcement not being ground flush. The extent of testing was directed to be based upon the amount of discrepancies found.

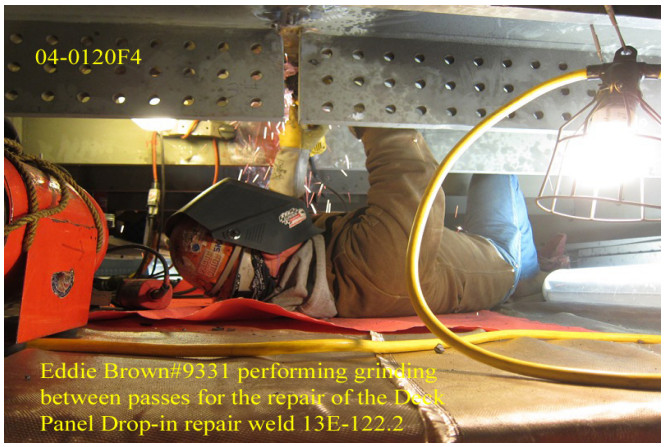
The Following Rejects were discovered by QA and not reported on QC UT report provided. This QAI generated a TL-6027 UT report on this date.

ESW “F” Face A Between 9M~13M
Y=7320, X= +10, Sound Path=97, Depth=34, Length 20mm, -2 (class A reject).
QC Report shows as recordable at Y=7300, In way of previous repair.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No relevant conversations.



WELDING INSPECTION REPORT

(Continued Page 3 of 3)

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Patterson,Rodney	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer